

Abstract

Abstract: The invention relates to a scanning microscope for reproducing an object (1), said microscope comprising a light source (2), a spectrally selective element (8) which can be adjusted in an almost infinitely variable manner, a spectrally selective detection device (4) which can be adjusted in an almost infinitely variable manner, an illumination beam path (3) extending from the light source (2) to the object (1), and a detection beam path (5) extending from the object (1) to the detection device (4). According to the invention, the spectrally selective element (8) is used to select light from the light source (2) for illuminating the object; the spectrally selective element (8) is used to mask out the selected light of the light source (2), which is reflected and/or scattered on the object (1), from the detection beam path; and at least one wavelength range of the light extending along the detection beam path (5) can be detected by means of the spectrally selective detection device (4). The present invention is characterised, for the detection of an object (1) at a high scanning speed with an improved signal-to-noise ratio, in that the illumination beam path (3) and the detection beam path (5) are embodied in the form of a confocal slit scanner.